

described embodiments can also be embodied as computer readable code on a non-transitory computer readable medium for controlling manufacturing operations or as computer readable code on a non-transitory computer readable medium for controlling a manufacturing line. The non-transitory computer readable medium is any data storage device that can store data, which can thereafter be read by a computer system. Examples of the non-transitory computer readable medium include read-only memory, random-access memory, CD-ROMs, DVDs, magnetic tape, optical data storage devices, and carrier waves. The non-transitory computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

[0085] The foregoing description, for purposes of explanation, used specific nomenclature to provide a thorough understanding of the described embodiments. However, it will be apparent to one skilled in the art that the specific details are not required in order to practice the described embodiments. Thus, the foregoing descriptions of the specific embodiments described herein are presented for purposes of illustration and description. They are not target to be exhaustive or to limit the embodiments to the precise forms disclosed. It will be apparent to one of ordinary skill in the art that many modifications and variations are possible in view of the above teachings.

What is claimed is:

1. A method of adjusting a surface of a substrate, the method comprising:

comparing a contour of the surface to a reference contour of a reference surface;

based upon the comparing, identifying a portion of the surface having a corresponding surface contour that is out of conformance with respect to the reference contour as:

- (1) a bump when the corresponding surface contour is proud of the reference contour, otherwise
- (2) as a divot; and

bringing the corresponding surface contour of the identified portion into conformance by:

depositing a first amount of filler material in a region around the bump, otherwise, depositing a second amount of filler material into the divot.

2. The method of claim 1, wherein when the divot cannot be brought into conformance, changing a shape of the divot.

3. The method of claim 2, wherein changing the shape of the divot comprises laser ablating the divot.

4. The method of claim 1, wherein the substrate is a housing of an electronic device.

5. The method of claim 4, wherein an overall shape of the housing is embodied as a reference datum comprising the reference contour.

6. The method of claim 1, wherein the substrate is a primary substrate and the surface is a mating surface used to join with a secondary substrate.

7. The method of claim 1, wherein the bump or divot is an artifact of one or more machining processes.

8. The method of claim 1, wherein depositing the first amount of filler material or the second amount of filler material comprises:

sequentially printing on multiple layers of ink in a region around the bump or into the divot.

9. The method of claim 8, wherein sequentially printing on the multiple layers of ink comprises: allowing each layer of ink to conform to a portion of the bump or divot.

10. The method of claim 1, further comprising:

identifying a sloped portion of the surface with respect to the reference contour; and

bringing the sloped portion into conformance by depositing a third amount of filler material on the sloped portion in a stepwise fashion in accordance with the reference contour.

11. The method of claim 1, further comprising:

after depositing the first amount or second amount of filler material, applying an adhesive layer on the identified portion, wherein adjusting the surface contour of the identified portion increases a wetting of the adhesive layer applied on the identified portion.

12. The method of claim 11, wherein the substrate is a primary substrate, the method further comprising:

joining the primary substrate with a secondary substrate by positioning the secondary substrate on the adhesive layer, wherein adjusting the surface contour of the identified portion prevents a gap associated with the bump or divot from forming between the primary substrate and the secondary substrate.

13. A method of modifying a mating surface of a substrate, the mating surface arranged to bond with an inlay, the method comprising:

comparing a shape of the mating surface to a shape of a reference surface of the substrate, the reference surface associated with an external surface of the substrate; and

depositing a filler material on the mating surface such that the mating surface takes on the shape of the reference surface, wherein when the inlay is bonded to the mating surface, an external surface of the inlay is substantially flush with the external surface of the substrate.

14. The method of claim 13, wherein the shape of the reference surface is substantially planar.

15. The method of claim 13, wherein the shape of the reference surface is curved.

16. The method of claim 13, wherein depositing the filler material comprises:

printing on multiple sections of filler material at corresponding portions of the mating surface.

17. The method of claim 16, wherein at least two of the multiple sections of filler material have different thicknesses.

18. The method of claim 13, wherein the inlay is bonded to the mating surface via one or more adhesive layers.

19. A method of modifying a housing, the housing having a perimeter defined by a lip portion defining dimensions of an opening for accommodating a cover glass, the method comprising:

obtaining dimensional data related to the housing; and

depositing a filler material on a surface of the lip portion so as to decrease the dimensions of the opening in accordance with the dimensional data of the cover glass.

20. The method of claim 19, wherein the surface of the lip portion is a first surface and the filler material is a first filler material, the lip portion including a second surface that is non-parallel with the first surface, the method further comprising: